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U.S. DEPARTMENT OF AGRICULTURE - FOREST SERVICE
CALIFORNIA FOREST AND RANGE EXPERIMENT STATION
Division of Forest Insect Research

MOUNTAIN PINE BEETLE CONDITIONS JUNE LAKE AREA, INYO NATIONAL FOREST RECONNAISSANCE SURVEY July 1958

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A reconnaissance was made on July 24, 1958 of an area between June Lake and Glass Creek on the Inyo National Forest. The survey was made by G. C. Trostle of the California Forest and Range Experiment Station to determine the cause of damage observed earlier, during the aerial survey conducted in the spring. Snowglare made it impossible to ascertain the exact nature of the damage from the aerial survey.

The area surveyed covers the mile-wide ridge which rises about 2,000 feet in 1 1/2 miles southeast of June Lake. The soil is pumice and supports almost no growth except open stands of pine. The damaged timber lies within about a quarter-mile strip extending a mile or more along the ridge.

Host and Insect Species

The two principal tree species are lodgepole pine and whitebark pine. Both species were attacked by the mountain pine beetle, Dendroctonus monticolae Hopk.

The typical lodgepole is short, mature, with a long crown and an average diameter of around 20 inches. The whitebark pine is characteristically multiple stemmed, about the same height as the lodgepole, and has an average diameter of 12 to 14 inches. The lodgepole-pine type begins at about 8,800-feet elevation where the ridge begins to level off. At about 9,200 feet, whitebark pine occurs in mixture with the lodgepole. It is at this line of transition, where whitebark pine becomes a prominent part of the stand, that the mountain pine beetle is active, killing the trees.

Status of the Infestation

The infestation extended over an area estimated to be somewhat less than 500 acres. Within this area the mountain pine beetle has been active for many years. No attempt was made to estimate the total number of trees killed, but it was observed that whitebark pine was much more severely damaged than lodgepole.

The broods in the currently attacked trees were plentiful. At the time of the survey (July 24), the adults had not emerged. By contrast, in a similar outbreak at Tuolumne Meadows, which is about the same elevation, but 40 miles to the northwest, emergence was underway by July 4. Many hymenopterous parasites were observed ovipositing on the broods, and these may be an important factor in holding the infestation in check.

Discussion

This infestation appears to have existed over some length of time without appreciably increasing in area. The result is that many of the trees have been killed, and the remaining stand within the infested area is in very poor condition. The area uninfested shows very little evidence of past mountain pine beetle work.

Since the area where this infestation occurs is not particularly accessible, it probably has little current value for recreation. The short and branching nature of the timber makes it of such a quality that it is probably not of much economic value. The infestation does offer some possibilities for certain types of mountain pine beetle studies.

From the observations made in this survey, it does not appear that the infestation constitutes a serious threat to uninfested stands. The outbreak should be kept under surveillance, however, to follow its course and to provide a basis for prompt control action if it shows signs of becoming more serious.

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